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UTILITY PATENT APPLICATION TRANSMITTAL

Attorney Docket No. HSJ920040056US1

First Inventor Matthew J. Carey

CURRENT-PERPENDICULAR-TO-PLANE MAGNETORESISTIVE SENSOR WITH FREE LAYER STABILIZED BY IN-STACK ORTHOGONAL MAGNETIC COUPLING

(Only for new nonprovisional applications under 37 CFR 1.53(b)

Express Mail Label No. ER 265251618 US

APPLICATION ELEMENTS See MFEP chapter 600 concerning utility patent application contents. Application (See application (See application) contents. Application (See application) (See applica	ADDRESS TO: Box Patent Application Contents ADDRESS TO: Box Patent Application ADDRESS ADDRES	Territy for the Williams	Tal applications under 57 Of IC 1:00 [,,, LAPIGO	o man cabol mo. E			
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or a computer program listing appendix Background of the Invention Brief Summary of the Invention Brief Description of the Drawings (if filed) Detailed Description Claim(s) Abstract of the Disclosure A COMPANYING APPLICATION PARTS 9. Assignment Papers (cover sheet & document(s)) 10. 37 CFR 3.73(b) Statement Power of Attorney Active there is an assignee Active there is an assignee Power of Attorney Active there is an assignee Active there is an assignee Power of Attorney Active there is an assignee Information Disclosure 11. English Translation Document (if applicable) Information Disclosure 12. Information Disclosure 13. Preliminary Amendment 14. Return Receipt Postcard (MPEP 503) Signed statement atlached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). 15. Griffied Copy of Priority Document(s) Information Disclosure 14. Return Receipt Postcard (MPEP 503) Signed statement atlached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). 16. Application Data Sheet under 37 CFR 1.76 17. Other: 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) Prior application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) Prior application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) Prior application below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) Prior application information Prior application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) Prior application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) Other: 18. If a CONTINUING APPLICATION, the Ckepton Continuation-in-part (CIP) Other: Continuation D	or a computer program listing appendix Background of the Invention Brief Summary of the Invention Brief Description of the Drawings (if filed) Detailed Description Claim(s) Abstract of the Disclosure 4.	- Statement Reg	arding Fed sponsored R & D		i. CD-ROM o	r CD-R (2	copies)); or $^{\circ}$
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16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. 17. Other:	Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(I). Applicant must attach form PTO/SB/35 or its equivalent. 16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(I). Applicant must attach form PTO/SB/35 or its equivalent. 17. Other: Ot			15.	Certified Copy of F	Priority Do	cument	i(s)
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Country USA Telephone (408) 396-8411 Fax (408) 904-6605	Country USA Telephone (408) 396-8411 Fax (408) 904-6605 Name (Print/Type) Lewis L. Nunnelley Registration No. (Attorney/Agent) 42,942	Address	18938 Congress Junction	Ct.				
	Name (Print/Type) Lewis L. Nunnelley Registration No. (Attorney/Agent) 42,942	City	Saratoga	State	CA	Zip C	Code	95070
	///	Country	USA	Telephone	(408) 396-8411	Fe	x ((408) 904-6605
Name (Print/Type) Lewis L. Nunnelley // Registration No. (Attorney/Agent) 42,942		Name (Print/Type)	Lewiş L. Nunnelley	△ Reg	istration No. (Attorney	//Agent)	42,9	42
		Signature	Juna Alma	-//-/	ĺ	Date	3/16	5/04

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FEE TRANSMITTAL for FY 2004

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT

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Complete if Known				
Application Number				
Filing Date				
First Named Inventor	Matthew J. Carey			
Examiner Name				
Group Art Unit				
Attorney Docket No.	HSJ920040056US1			

METHOD OF PAYMENT	FEE CALCULATION (continued)				
The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:	3. ADDITIONAL FEES				
Deposit Deposit	Large Small				
Account Number 502587	Entity Entity Fee	Fee Paid			
Deposit Account Hitachi Global Storage Technologies	Code (\$) Code (\$)				
Name Name	1051 130 205 65 Surcharge - late filing fee or oath				
Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17	1052 50 227 25 Surcharge - late provisional filing fee or cover sheet				
Applicant claims small entity status.	1053 130 139 130 Non-English specification				
See 37 CFR 1.27 2. Payment Enclosed:	1812 2,520 147 2,520 For filing a request for ex parte reexamination				
□ □ □ □ □ □ Money □	1804 920* 112 920* Requesting publication of SIR prior to Examiner action				
Order Order	1805 1,840* 113 1,840*Requesting publication of SIR after				
FEE CALCULATION	Examiner action —				
1. BASIC FILING FEE	1251 110 215 55 Extension for reply within first month				
Large Entity Small Entity Fee Fee Fee Fee Description	1252 420 216 205 Extension for reply within second month 1253 950 217 465 Extension for reply within third month				
Code (\$) Code (\$) Fee Paid					
1001 770 2001 385 Utility filing fee 770.00	4055 0 040 000 005				
1002 340 2002 170 Design filing fee	1255 2,010 228 985 Extension for reply within fifth month				
1003 530 2003 265 Plant filing fee	1401 330 219 160 Notice of Appeal				
1004 770 2004 385 Reissue filing fee	1402 330 220 160 Filing a brief in support of an appeal				
1005 160 2005 80 Provisional filing fee					
SUBTOTAL (1) (\$) 770.00	1451 1,510 138 1,510 Petition to institute a public use proceeding 1452 110 240 55 Petition to revive - unavoidable				
2. EXTRA CLAIM FEES	1453 1,330 241 650 Petition to revive - unintentional				
Fee from Extra Claims below Fee Paid	1501 1,330 242 650 Utility issue fee (or reissue)				
Total Claims 41 -20** = 21 x 18.00 = 378.00	1502 480 243 235 Design issue fee	$\neg \neg$			
Independent 3 - 3** = 0 x 86.00 = 0.00	1503 640 244 310 Plant issue fee				
Multiple Dependent	1460 130 122 130 Petitions to the Commissioner				
	1807 50 123 50 Processing fee under 37 CFR 1.17(g)				
Large Entity Small Entity Fee Fee Fee Fee Description	1806 180 126 180 Submission of Information Disclosure Stmt				
Code (\$) Code (\$) 1202 18 2202 9 Claims in excess of 20	8021 40 581 40 Recording each patent assignment per property (times number of properties)	40			
1201 86 2201 43 Independent claims in excess of 3	1809 770 246 370 Filing a submission after final rejection (37 CFR § 1.129(a))				
1203 290 2203 145 Multiple dependent claim, if not paid	1810 770 249 370 For each additional invention to be				
1204 86 2204 43 ** Reissue independent claims over original patent	examined (37 CFR § 1.129(b))				
1205 18 2205 9 ** Reissue claims in excess of 20	1801 770 279 375 Request for Continued Examination (RCE)				
and over original patent	1802 900 169 900 Request for expedited examination of a design application				
SUBTOTAL (2) (\$) 378.00	Other fee (specify)				
**or number previously paid, if greater; For Reissues, see above	*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40	0.00			

SUBMITTED BY	SUBMITTED BY Complete (if applicable)				
Name (Print/Type)	Lewis L. Nunnelley	Registration N (Attorney/Agent)		Telephone	(408) 717-6570
Signature	allund Mand	WM1		Date	3/16/04

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of

:

Matthew J. Carey et al.

Group Art Unit: Not Yet Assigned

Serial No. Not Yet Assigned

Examiner: Not Yet Assigned

For:

"Current-Perpendicular-To-Plane Magnetoresistive Sensor With Free Layer

Stabilized By In-Stack Orthogonal Magnetic Coupling"

Assistant Commissioner of Patents and Trademarks Alexandria, VA 22313-1450

EXPRESS MAIL CERTIFICATE

I hereby certify that the above paper/fee is being deposited with the United States Postal Service as _Express Mail Post Office to Addressee_ service in an envelope addressed to the Assistant Commissioner for Patents and Trademarks, Alexandria, VA 22313-1450 on March 16, 2004.

Express Mail NO.: ER 265251618 US

Person mailing paper/fee: Mary Lou Domenici

Signature